

JOINT APPLICATION FOR INCIDENTAL HARASSMENT AUTHORIZATION
Akutan Airport, Alaska - Airport Construction and Hovercraft Operation

Applicants

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Background

On May 30, 2007, the U.S. Fish and Wildlife Service ("FWS") issued a Biological Opinion under section 7 of the Endangered Species Act ("ESA") analyzing the effects of (1) the proposed construction of a new airport, access road, and hovercraft landing area on Akun Island and a hovercraft landing and storage area on Akutan Island; and (2) the issuance of a Clean Water Act section 404 permit permitting project construction on species and habitat under your jurisdiction. The May 30, 2007, Biological Opinion concluded, among other things, that the proposed action was not likely to jeopardize the Southwest Alaska Distinct Population Segment of northern sea otters.

The Federal Aviation Administration ("FAA"), as the lead federal action agency in this proceeding, has recently engaged in informal consultation with FWS concerning the effects of the proposed action on northern sea otters. The results of this informal consultation are summarized in letters dated September 27, 2007 (FAA 2007), and September 28, 2007 (FWS 2007a), attached to this application. These letters describe in detail (1) proposed conservation measures the Applicants have incorporated into the proposed action to avoid, minimize, and mitigate the effects of the proposed action on listed northern sea otters; and (2) procedural agreements between project sponsors, FAA, and FWS to collaboratively develop and submit an application for an Incidental Harassment Authorization ("IHA") pursuant to Section 102 of the Marine Mammal Protection Act ("MMPA").

The following constitutes the joint application of the Alaska Department of Transportation and Public Facilities ("DOT&PF") and the Aleutians East Borough ("the

Borough”) (collectively, “the Applicants”) for an IHA for the Southwest Alaska Distinct Population Segment of northern sea otters (*Enhydra lutris kenyoni*).

1. A detailed description of the specific activity or class of activities that can be expected to result in incidental taking of marine mammals.

A detailed description of the proposed action is contained in a Final Environmental Assessment (“FEA”) and Finding of No Significant Impact/Record of Decision (FONSI/ROD) prepared by the Applicants for FAA and issued in December of 2007, and a Biological Opinion for the proposed Akutan Airport Project issues by FWS in May, 2007. A brief summary of the proposed action based on the FEA and Biological Opinion follows.

Under the proposed action, a new airport to serve the community of Akutan would be constructed on the southwestern portion of Akun Island, approximately 7 miles east of the community. Investigation of the proposed action began in March, 2005, due to concerns that other alternatives would not provide reliable access from the City of Akutan. Based on planning analyses that were completed commencing in 2000 (HDR 2000; HDR 2003a; HDR 2003d) that evaluated a number of airport locations, the proposed action, in combination with the avoidance, minimization, and mitigation measures identified below in ES.4, is the alternative that best meets the purpose and need to provide safe and reliable access for the community of Akutan due to its close proximity and visibility to the community, dual runway approach, and minimal Part 77 surface penetrations.

Under this alternative, the terrain at the proposed airport site on Akun is much flatter than the terrain at the alternative Fish Banks site. Given its gentle topography, a 4,500 ft runway can be constructed on Akun. Even with extensive ground-work, a 4,500 ft runway is not possible under the Fish Banks alternative. A 4,500 ft runway is preferred to allow the SAAB 340 to fly without weight restriction, accommodating a maximum of 30 passengers per flight. The SAAB 340 Factory planning guidelines indicate that an ideal runway at Akun would be 4,625 feet long at zero wind. As described in Section 5 of the FEA, volcanic hazard is also less in this area compared to other sites. This alternative would also allow direct emergency evacuations to Anchorage and nearby locations.

To access this airport site under the range of alternatives considered, multiple marine landing sites were evaluated. Community input indicated that the best marine landing sites would be found at Surf Bay and Trident Bay. Landing sites at Trident Bay were determined not feasible because they would require daily travel through Akun Strait, an area of turbulent water created by the meeting of the Bering Sea and Pacific Ocean that would jeopardize passenger comfort and safety. Conversely, preferred landing sites at Surf Bay are accessible without transiting the narrow Akun Strait on a daily basis. Also, landing at Trident Bay would require building and maintaining a long access road to the airport site. Finally, beach conditions at potential hovercraft landing

sites around Trident Bay are relatively less conducive to hovercraft operations compared to those at Surf Bay.

A number of landing sites along Surf Bay were determined not feasible; landing at the western point of Surf Bay was dismissed due to the likelihood of impacting the former village site of Chulka (a potentially significant cultural site). Landing sites along Surf Bay's eastern and northern shore were eliminated because the area is covered with active sand dunes.

Under this alternative, access to the Akun airport location would be provided by hovercraft from the City of Akutan to Surf Beach. Surf Beach offers a protected hovercraft landing area. Marine service by hovercraft between the community of Akutan and Surf Bay on Akun Island would satisfy passenger comfort and weather operability goals. When not in use, the hovercraft would be stored in a building at the head of Akutan Harbor. Staff would access the hovercraft storage area at the head of the harbor by traveling in a skiff.

Under this alternative, a 3,000 foot-long road would connect the hovercraft landing pad on Surf Beach to the runway located on the bench above the beach. A diesel bus would be used to transport passengers between the hovercraft and aircraft. The bus would be fueled onsite and stored at the airport when not in use. The preferred alternative allows for a short gradual access road that would be easier to maintain than the long mountainous road required for the Fish Banks alternative.

2. The date(s) and duration of such activity and the specific geographical region where it will occur.

a. Timing of Construction and Hovercraft Operation

Construction of the airport and related transportation of construction materials will commence during the 2nd quarter of 2009 and continue until the 4th quarter of 2010. Hovercraft testing may commence as early as the 1st quarter of 2009, with sustained operations commencing in the 4th quarter of 2010, after completion of construction.

b. Geographic Location of Action

The community of Akutan is located on a small bay on Akutan Island in the eastern region of the Aleutian Islands (Figure 1). The city of Akutan has a population of about 741. About 16.4% of the population is Alaskan Natives, and about 45 percent of the residents are below the poverty level. The community is located 35 miles east of Unalaska and 766 miles southwest of Anchorage.

The proposed location for the new airport to serve the community of Akutan is on the southwestern portion of Akun Island, approximately 7 miles east of the community. Investigation of the proposed action began in March 2005 due to concerns that all other alternatives would not provide reliable access from the City of Akutan.

To access the proposed airport site, multiple marine landing sites were evaluated. Community input indicated that the best marine landing sites would be found at Surf Bay and Trident Bay. Landing sites at Trident Bay were determined not feasible because they would require daily travel through Akun Strait, an area of turbulent water created by the meeting of the Bering Sea and Pacific Ocean that would jeopardize passenger comfort and safety (Figure 1). Also, landing at Trident Bay would require building and maintaining a long access road to the airport site.

3. The species and numbers of marine mammals likely to be found within the activity area.

Sea otters have been observed in the project area during biological surveys, beginning in 1983. LGL observed sea otters in Akutan Harbor during their winter 1999/2000 surveys conducted in November, January, February, and March. Approximately 30 sea otters were observed at the head of the bay in January 2001. At least 29 sea otters were observed in near-shore environments, generally as singles or pairs. A raft of 18 individuals was observed at the northwest corner of the harbor. USFWS surveys in February 2001 observed two relatively large groups of sea otters, one group of seven at Akutan Point and one group of 12 near the mouth of South Creek.

In July, 2004, USFWS performed aerial surveys of Akutan and Akun Islands. Two sea otters were observed near-shore and directly south of the City of Akutan; 11-20 were observed approximately 2.5 kilometers west of the proposed hovercraft landing; and three were observed two kilometers north of the hovercraft landing. A second aerial survey was performed in August and three sea otters were spotted along southern shore of Akutan Harbor, and one sea otter was seen in Akutan straight. Additional sea otters were observed on both islands, and between 121 and 168 individuals were spotted around the shoreline of Akun Island.

Surveys for sea otters were conducted in winter 2006 as part of the field investigations for the Akun Alternative. These surveys were conducted by HDR Alaska, Inc. in January, February, and March 2006 in Akutan Harbor, Akun Strait, and Surf Bay along the proposed Akun airport hovercraft route. Sea otter numbers were highest in January (22), with declines in February (17), and by March only 7 otters were observed. Preferred habitat appeared to include protected areas in Akutan Harbor near the community of Akutan and along nearshore habitats at Akun and Green Island. Most of the otters sighted were individuals and only one female with a pup was observed during the winter surveys.

A detailed description of the status, distribution, and seasonal distribution of northern sea otters is contained in the Biological Assessment for the proposed IHA, and the Biological Opinion (FWS 2007) for the proposed Akutan Airport Project.

4. A description of the status, distribution, and seasonal distribution of the affected species or stocks of marine mammals likely to be affected by such activities.

The USFWS listed the northern sea otter as threatened under the ESA on August 9, 2005 (70 FR 46366). Three stocks of northern sea otters are recognized in Alaska: the southwestern, southcentral and southeastern stocks. The southwestern stock ranges from the Alaska Peninsula to the end of the Aleutian Chain and Kodiak Island Archipelago and the Pribilof Islands. Otters prefer a protected inshore area with a rocky bottom and an abundance of kelp, especially giant kelp, which are used for rest and provide the ideal foraging grounds.

Sea otters usually remain within a few kilometers of their established feeding grounds, however, translocated populations are known to shift and expand their distribution in favorable habitats. Local and temporary shifts of sea otter distribution to avoid heavy sea ice along the northern shore of the Alaska Peninsula are known to occur.

A detailed description of the status, distribution, and seasonal distribution of northern sea otters is contained in the Biological Assessment for the proposed IHA, and the Biological Opinion (FWS 2007) for the proposed Akutan Airport Project.

5. The type of incidental taking authorization that is being requested (i.e., takes by harassment only; takes by harassment, injury and/or death) and the method of incidental taking.

The Biological Opinion (FWS 2007) indicates that take-in form of harassment may occur as a result of noise or other disturbance associated with airport construction, airport and hovercraft operations, and related support activities.

6. By age, sex, and reproductive condition (if possible), the number of marine mammals (by species) that may be taken by each type of taking identified in paragraph (a)(5) of this section, and the number of times such takings by each type of taking are likely to occur.

a. Age, sex, and reproductive condition

Consultations with FWS indicate that, with the exception of mother/pup pairs, it is not possible to identify the age, sex, or reproductive conditions of northern sea otters that may be taken.

b. Amount or extent of taking

It is difficult to measure the amount of take or harassment that is likely to occur as a result of hovercraft operation because (1) no published scientific information exists regarding sea otter hearing sensitivity; and (2) available data suggest sea otter habituation may occur over the course of the proposed action, thus making it difficult to calculate declining levels of take and harassment on an annual basis (FWS 2007). Should FWS determine through further discussions and analysis that the likelihood of take or harassment are insignificant or discountable, the parties will promptly document this

conclusion and modify the requirements of, or requirement, to obtain any incidental take statement of IHA accordingly.

Using noise disturbance criteria which assumes that northern sea otters will be harassed if they encounter noise levels in excess of 60 dB (ambient conditions), the Applicants estimate that an average of 3 otters may be taken per hovercraft transit, with a range of 0-10 per transit. Assuming 4 transits per day to account for January activity, potential emergencies, and other unplanned trips, including related maintenance activities, the Applicants estimate that an average of 12 otters may be taken on a daily basis as a result of hovercraft operation. An average of 1 otter may be taken on a daily basis during project construction, with a range of 0-3 per construction day. It is important to note that these estimates of potential harassment are conservative, and assume that take in the form of harassment may occur if any northern sea otter encounters sound levels above ambient sound conditions.

Take estimates were derived by overlaying northern sea otter observation data on currently-planned hovercraft route maps. A 60 dB noise contour was then constructed around the hovercraft route using noise attenuation factors derived from the Biological Opinion. Sea otter sightings that occurred within this contour were then used to construct take estimates, accounting for daily and seasonal travel schedules, project construction, and emergency events. The Applicants believe this approach to estimating take is a conservative one for the reasons outlined above, and because it assumes that sea otters will in fact experience sound levels above background conditions if they occur within the 60 dB noise contour. In addition, use of the 60 dB contour is a conservative approach, as ambient noise could be higher than that level during high wind conditions or due to other weather variables. As discussed above, available information indicates that sea otters are likely to habituate to hovercraft noise over time, thus reducing the likelihood that such noise will result in any biologically-significant impacts to the species.

7. The anticipated impact of the activity upon the species or stock.

Based upon information contained in the Biological Assessment (FAA 2006) and BiOp (FWS 2007), as well as information provided to FWS by FAA and the Applicants during formal and informal consultation, FWS determined the proposed action is not likely to jeopardize listed sea otters (FAA 2007; FWS 2007). FWS has likewise indicated through consultation with FAA that the effects of anticipated take or harassment will not result in significant adverse impacts to northern sea otters (FAA 2007; (FWS 2007)).

Sea otters may habituate to the presence and operations of the hovercraft in the action area. In the event monitoring information developed during the first year of hovercraft operation indicates that sea otter habituation has occurred, the need to obtain a take or harassment authorization may no longer exist. Consistent with applicable agency regulations, FWS will reevaluate the need for an IHA prior to the submission of any future IHA application.

8. The anticipated impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses.

The Applicants do not anticipate any impact of the activity on the availability of the species for subsistence uses. Northern sea otters are not harvested for subsistence purposes[DMB1] in the action area.

9. The anticipated impact of the activity upon the habitat of the marine mammal populations, and the likelihood of restoration of the affected habitat.

As described above, based upon information contained in FWS's Biological Opinion, as well as more recent information provided to FWS by FAA and the Project Sponsors during formal and informal consultation, FWS has concluded the proposed action as modified herein is not likely to jeopardize listed sea otters and concurs the effects of anticipated take or harassment associated with the proposed action will not result in significant adverse effects on northern sea otters (FAA 2007; FWS 2007). 84

10. The anticipated impact of the loss or modification of the habitat on the marine mammal populations involved.

As described above, based upon information contained in FWS's Biological Opinion, as well as more recent information provided to FWS by FAA and the Project Sponsors during formal and informal consultation, FWS has concluded the proposed action as modified herein is not likely to jeopardize listed sea otters and concurs the effects of anticipated take or harassment associated with the proposed action will not result in significant adverse effects on northern sea otters (FWS 2007).[DMB2]

11. The availability and feasibility of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat, and on their availability for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance.

As described in correspondence between FAA and FWS (FAA 2007; FWS 2007), the Applicants propose to implement the following measures to avoid, minimize and mitigate the effects of the proposed action on northern sea otters:

- a. A hovercraft will be used to transport passengers to and from the airport.

As described in the Biological Assessment, hovercrafts produce less wake and less underwater noise than other marine vessels. Peer-reviewed scientific literature concludes that a hovercraft is considerably quieter underwater than a similar-sized conventional vessel, and that hovercraft may be an attractive alternative to conventional

vessels if underwater sounds cause concerns. In-air sound may constitute a source of disturbance for listed sea otters.

- b. The hovercraft landings will be located to minimize impacts to intertidal and subtidal areas.

Hovercraft landings will be constructed primarily in areas away from intertidal and subtidal areas to avoid adverse affects on northern sea otters and their habitat. Surf Beach landing site construction would impact about 0.4 intertidal acres and about 0.01 subtidal acres. Construction at the head of Akutan Harbor would impact about 0.1 intertidal acres and about 0.6 subtidal acres. Such construction is likely more environmentally-sensitive than construction of fixed, in-water docks or other related facilities.

- c. No dredging or pile driving are anticipated during the construction of the hovercraft landings.

Both dredging and pile driving possess the potential to harass northern sea otters due to habitat or noise disturbance. We anticipate that the use of a hovercraft will avoid the need to construct in-water facilities such as moorings, piers, or docks that could require dredging or pile driving.

- d. The hovercraft will be operated pursuant to a Route Operational Manual which will dictate the avoidance of sensitive areas and species.

As discussed in the Biological Assessment, a Route Operational Manual will be developed in consultation with the FWS. The purpose of the Route Operational Manual is to develop hovercraft routes and operational procedures that avoid and minimize the likelihood of northern sea otter disturbance. As described below, the Applicants propose to expedite development of the Route Operational Manual to insure the proposed action avoids adverse affects to listed northern sea otters and other protected marine mammals. Operator compliance with the Route Operational Manual will be required as a condition of airport design approval and Clean Water Act 404 permit issuance.

- e. All fueling will be conducted to the maximum extent feasible at least 100 feet away from Akutan Harbor and Surf Bay, and fuel storage will be at least 100 feet away from Akutan and Surf Bay.

As discussed in the Biological Assessment, northern sea otters are susceptible to oiling due to fuel spills because they depend on their insulation of dense fur to keep warm. They likewise may ingest oil during grooming and feeding. To address this issue, the Applicants propose to conduct all fueling activities to the maximum extent feasible at least 100 feet away from Akutan Harbor and Surf Bay. Fuel storage will also occur at least 100 feet away from these locations. The Applicants will comply with all applicable Federal and State fuel handling and storage requirements, further reducing the risk that any spill reaches sensitive northern sea otter habitat.

- f. To prevent contamination, hovercraft maintenance activities will occur in the hovercraft storage building or on the hovercraft landing.

As discussed above, sea otters are susceptible to oiling due to fuel spills because they depend on their insulation of dense fur to keep warm. They likewise may ingest or other compounds during grooming and feeding. To address the risk of spills or contamination associated with hovercraft maintenance, the Applicants propose to conduct all maintenance activities either on hovercraft landing areas, above inter-tidal or sub-tidal areas; or in the hovercraft storage building. The Applicants will comply with all applicable Federal and State hazardous materials handling and storage requirements, further reducing the risk that any contamination reaches sensitive northern sea otter habitat.

- g. Expedite Completion of the Route Operation Manual.

The Applicants propose to expedite completion of a Route Operation Manual in consultation with FWS, NMFS, the U.S. Coast Guard, and FAA. The Route Operation Manual will outline specific, detailed procedures to avoid and minimize impacts to sea otters. The Manual will not only identify hovercraft routes, but it will also provide a clearly-written protocol that all hovercraft operators will be required to follow during hovercraft operations. The Applicants will commence developing a draft Route Operation Manual to the agencies within 60 days from completion of ESA consultation. The Applicants will develop the Route Operation Manual in consultation with the agencies. The Applicants will submit a final Route Operation Manual to the agencies for review and approval within 60 days from receipt of all agency comments on the draft.

During Route Operation Manual development, the applicant proposes to consult with the hovercraft manufacturer to insure that hovercraft operations occur in the most environmentally-sensitive manner possible. Through these discussions the parties and the manufacturer may identify additional, cost-effective measures to further reduce vessel noise.

h. Research Activities to Assess the Potential Effects of Hovercraft Operations on Northern Sea Otters

Given the considerable uncertainties associated with the potential effects of hovercraft operations on listed northern sea otters, the applicant proposes to undertake a research effort to evaluate in detail the effects of hovercraft noise on northern sea otter behavior and physiology. Information developed through research at Cold Bay will augment, and potentially obviate the need for, certain research efforts at Akutan. Appendix A to the September 27, 2007, letter from FAA to FWS (FAA 2007) discusses in detail the proposed study design and methods for this research effort.

To evaluate the potential impacts of hovercraft operations on northern sea otters in the Akutan Bay region, the applicant will conduct a study of sea otter movements and diving behaviors in the project area. The study proposes using time-depth recorders and VHF radio-transmitters to evaluate movement and dive patterns before and after the hovercraft becomes operational. The Applicants propose to develop and implement a final study plan in consultation with FWS. The Applicants will fund such project and will strive to involve the FWS, local community members, and native organizations in these research activities.

i. Establishment of Northern Sea Otter Avoidance Areas

The Applicants propose to establish northern sea otter avoidance areas in consultation with the FWS. These avoidance areas will serve to help delineate areas of likely northern sea otter occurrence to allow for their avoidance. During the first year of operation, the avoidance areas will be periodically surveyed and monitored, in association with hovercraft operation. A detailed description of monitoring requirements is described in the Monitoring and Reporting sections below.

j. Hovercraft Speed and Course Alteration

If a northern sea otter is observed within a set distance (e.g., 1,200 feet) of the hovercraft (distances to be determined based on consultation with the FWS), and based on its position and the relative course of travel is likely to approach the hovercraft, the hovercraft's speed or course will, when practicable and safe, be changed to avoid impacts to the species.¹ Northern sea otter activities and movements relative to the hovercraft will be closely monitored to ensure that an animal does not (1) travel within a set distance (e.g., 600 feet) of a departing hovercraft; or (2) travel within a set distance (e.g., 300 feet) of an approaching hovercraft (the "potential disturbance area" or "PDA"). If either of these events occur, further mitigation measures must be taken (e.g., further course alterations or power down).

¹ Approach distances referenced in this section are based upon Table 5.2 in the December, 2006, Biological Assessment. These distances were calculated using an assumption that the applicant should use its best efforts to avoid exposing northern sea otters to noise levels greater than about 60-70 dB.

k. Power-down Procedures

A power down involves decreasing the speed of the hovercraft to avoid interactions with, and potential disturbance of, northern sea otters. If a northern sea otter is detected (1) within a set distance (e.g., 600 feet) of a departing hovercraft; or (2) within a set distance (e.g., 300 feet) of an approaching hovercraft, and the vessel's course or speed cannot be changed to avoid having the animal enter the PDA, then the hovercraft will, consistent with applicable design and operational requirements, decrease its speed to the lowest practicable level before the animal enters the PDA. Power-down procedures will be developed in consultation with the hovercraft manufacturer and FWS to ensure procedures are safe and within the operating parameters of the hovercraft.

l. Ramp-up Procedures

To provide additional protection to northern sea otters located near hovercraft landing areas by allowing individual animals to vacate the area prior to receiving a potential injury, and to further reduce the risk of potentially startling marine mammals with a sudden intensive sound, the applicant proposes to implement "ramp-up" procedures when starting up a hovercraft. Ramp-up would occur such that the sound associated with hovercraft operations would increase at a gradual rate, consistent with applicable design and operational requirements, and sufficient to allow the hovercraft to leave the ramp using the slope of the ramp in conjunction with minimum power. The Applicants propose to confer with the hovercraft operator (AEB) to develop ramp-up procedures consistent with this guideline.

Since airport construction activities and hovercraft testing are scheduled to commence in early 2009, the Applicants request that FWS commence processing the enclosed application in June, 2008, to ensure IHA issuance occurs prior to January 1, 2009.

m. Night-time Operations

The Applicants propose to work with FWS to develop night-time operating procedures to avoid and minimize impacts to northern sea otters and other species. Such night-time procedures may be best developed after commencing initial hovercraft operations to assess the relative impact of light use on bird species.

12. Where the proposed activity would take place in or near a traditional Arctic subsistence hunting area and/or may affect the availability of a species or stock of marine mammal for Arctic subsistence uses, the applicant must submit either a “plan of cooperation” or information that identifies what measures have been taken and/or will be taken to minimize any adverse effects on the availability of marine mammals for subsistence uses.

The proposed activities will not take place in or near a traditional Arctic subsistence hunting area and it will not affect the availability of any species of marine mammal for Arctic subsistence uses.

13. The suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species, the level of taking or impacts on populations of marine mammals that are expected to be present while conducting activities and suggested means of minimizing burdens by coordinating such reporting requirements with other schemes already applicable to persons conducting such activity.

The Applicants propose to implement the following monitoring and reporting program to increase knowledge regarding the species, and to assess the level of taking caused by the proposed action:

a. Vessel-based Monitoring

Vessel-based monitoring will be conducted by a qualified FWS-approved observer. Methods for observing, estimating distances to northern sea otters and other marine species, and recording data quickly and accurately will be tested prior to hovercraft operations at Akutan. Reticle binoculars (e.g., 7 x 50 Bushnell or equivalent) and laser range finders (Leica LRF 1200 laser range finder or equivalent) are considered standard equipment for observers on board ships with marine mammal observers. Final observation methods will be approved by the FWS. During the first year of hovercraft operation, monitoring will occur each time the hovercraft operates during daylight hours, including during initial sea trials in the action area. Monitoring methods during periods of darkness will be developed with the FWS. Thereafter, monitoring would occur as directed by the FWS.

Vessel-based observers will begin monitoring at least 30 minutes prior to the planned start of the hovercraft and during all periods of hovercraft operations to ensure the effectiveness of ramp-up as a mitigation measure. Observers will also observe the safety areas prior to hovercraft operation. If northern sea otters are observed within the safety areas, hovercraft operations would be altered in accordance with procedures contained in the Route Operation Manual to avoid or minimize noise-related disturbance to animals occurring in the area.

Data for each northern sea otter, other marine mammals, and Steller’s eiders observed in the action area during the period of hovercraft operations will be collected

and provided to FWS in GIS format for mapping and analysis. Numbers of northern sea otters observed, frequency of observation, sea state, any behavioral changes due to hovercraft operations, and other pertinent variables will be recorded and entered into a custom database using a notebook computer. The accuracy of the data entry would be verified by computerized validity data checks as the data are entered and by subsequent manual checking of the database. These procedures would allow initial summaries of data to be prepared during and shortly after the field program, and will facilitate transfer of the data to statistical, graphical, or other programs for further processing and archiving.

Results from the vessel-based observations would provide: (1) a basis for real-time mitigation; (2) information needed to estimate the number of northern sea otters that are determined to have been harassed; (3) data on the occurrence, distribution, and activities of marine mammals in the area where hovercraft operations are conducted; and (4) data on the behavior and movement patterns of northern sea otters seen at times with and without hovercraft activity.

b. Aerial Monitoring

In addition to vessel monitoring, the applicant will conduct periodic aerial monitoring in and near the project area, including Surf Bay or other (undisturbed) areas that provide northern sea otter habitat. The aerial surveys would: (1) collect and report data on the distribution, numbers, and general movements of northern sea otters in the project vicinity; (2) help inform operating vessels as to the presence of northern sea otters in the general area of operation; and (3) facilitate the estimation of impacts of hovercraft operations on northern sea otters. The aerial survey will be conducted after a research permit is obtained from the FWS.

Aerial monitoring will be conducted on a monthly basis as feasible, in consultation with FWS, during the first year of hovercraft operation. One FWS-approved observer will be on the aircraft observing and recording the location of northern sea otters. Space will be made available on the survey aircraft for FWS staff to participate in surveys when possible.

Data from aerial monitoring will be recorded on the number, group size, location (latitude/longitude), time, date, direction and angle from aircraft as determined by using a clinometer. Data will also be collected on tide, other pertinent environmental variables, and operational activities of the hovercraft (in operation, last time the hovercraft crossed the bay, present location of hovercraft). Observation conditions will be recorded at the start and finish of each survey or whenever conditions change (ceiling height, sea state, glare, other weather factors).

c. Reporting

Reports on vessel-based and aerial monitoring will be faxed or emailed to the FWS on a regular basis. Reports will describe hovercraft operations and northern sea otter monitoring activities during the reporting period. Frequency and specific content of reports will be determined based on consultation with the FWS.

14. The suggested means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing such incidental taking and evaluating its effects.

The Applicants propose to form an Akutan marine mammal workgroup in coordination with the City of Akutan, the Aleutians East Borough, the FWS, and NMFS. This workgroup will consist of representatives from affected native organizations, the City of Akutan, FAA, and the Services. The workgroup will provide a forum to discuss hovercraft monitoring results and other issues pertaining to airport operations and northern sea otter conservation.

The workgroup shall discuss, among other things, (1) any proposed changes in hovercraft operations to provide both FAA and the FWS with community perspectives on airport operations; (2) monitoring frequency and duration based upon monitoring results and related factors; and (3) completion of peer reviews for reports that evaluating and interpret monitoring data. The Applicant will coordinate development of the workgroup, and will be responsible for organizing meeting agendas, establishing meeting locations, and facilitating community involvement in such meetings. Workgroup meetings shall commence within 60 days from FAA's approval of airport construction, and shall occur on a quarterly basis for a minimum of 5 years after hovercraft operations commence.